



United States
Department of
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Forest
Service

Southeastern Area, State and Private Forestry
2500 Shreveport Highway
Pineville, Louisiana 71360

Reply to: 1380 (3430)

Date: January 16, 1981

Subject: Trip Report (Evaluation - Report. No. 81-2-13)

To: FORREST L. OLIVERIA
Acting Field Office Representative

Date: December 8-10, 1980
Travelers: Michael Connor and Paul Mistretta
Subject: Service and Training Trip
Destination: Holly Springs NF, Holly Springs, MS

In response to a request for information regarding an annosus root rot problem seen in the northern area of the Holly Springs NF, I planned a trip for December 8. Knowing our mileage restrictions, Mike Connor joined me on the trip; he had a need to meet with Steve Weaver (TMA) concerning proposed modifications to SPBIS (see trip report of December 18 for further details).

Since both Mike and I were going (and could discuss both Pathology and Entomology), we agreed to do a field training session during the same trip.

Tuesday we arrived at their office and met with Steve Weaver. Consulting soils maps, we found that the bulk of the ridge tops in the northern section of the forest (and, speculatively, over the whole forest) are in soil series listed by Froelich as high hazard soil types.

Prior to going to the field, Mike discussed his proposed SPBIS changes and outputs with Steve.

Having done what we could in the office we went to the field. Steve took a van and brought along the district soil scientist, three timber markers and two new silvicultural assistants. We made five stops during the rest of the day.

The first stop was made in an area which had been thinned and stump treated about 12 years ago. Recently, storm damaged timber had been salvaged and no stump treatment performed. The residual, sparse stand is now breaking up due to annosus root rot. Sporophores of Heterobasidion (Fomes) annosum (Fr.) Bref. were located and identified at the bases of several symptomatic trees and on some stumps. This area (Compartment 19) had a high hazard loessal soil. Field identification of soils and sporophores were discussed with the foresters and technicians.

The second stop which we made was in the same general area (Compartment 5). Precommercial thinning had been done in this area by deadening trees and leaving them standing. Many of the killed trees were rotten and falling over, but no annosus conks were seen. This was as expected. Normal decay of standing trees



does not include H. annosum; primarily being accomplished by other white rot fungi such as Hirschioporus (Polyporus) abietinus (Dicks. ex Fr.) Donk and Stereum spp., (both seen). This site, however, did have a high hazard loessal soil and preventative recommendations were made which should prevent future problems.

After lunch we made our third stop; a site which had been salvaged as a result of SPB activity during the past summer. No annosus sporophores were seen at this site, but tentatively identified at the site was a fresh, active sporophore of Phlebia (Peniophora) gigantea (Fr.) Donk (a biological control agent of annosus which occurs naturally in many areas). Soil here was again a high hazard type but the presence of the Phlebia is a good sign it should not be assumed that preventive measures are unnecessary on these sites. Natural populations of Phlebia reduce infection by annosus but will not exclude it from the site. Annosus root rot is still common in areas with natural P. gigantea populations.

The fourth site at which we stopped, a watershed area, was suffering decline without any evidence of annosus activity. The stand in the watershed is in the 60+ age class (possibly over 80 years of age) and is showing the early stages of stand breakup. Compounding the breakup was definite evidence of beetle activity. Several <10 tree spots were seen; cause Ips spp. Also identified was a large sporophore of Phaeolus (Polyporus) schweinitzii (Fr.) Pat. Presence of this serious root rotter on this site was expected and is sufficient to explain the decline being observed. No control recommendations are generally available for this problem which, however, does not normally cause serious loss in vigorously growing timber.

Mike spent time at this site discussing beetle problems and beetle sign identification. Also discussed was a variety of control measures available to the forester with a beetle problem. Finally we stopped at a site which was marked for thinning. Soil on this site was not among those identified as high hazard. However, a similar site across the road, which was thinned approximately five years ago, had sporophores of H. annosum on virtually every stump. It should be noted that no evidence of decline was observed in the residual stand. While the soil here was not a high hazard one I am still at a loss to explain the conflicting observations at this site.

Both the previously thinned site and the site to be thinned should be monitored for evidence of stand breakup.

While passing through Jackson, MS. on our return trip we stopped at both the Mississippi Forestry Commission and the National Forests in Mississippi offices. At the former we discussed the APHIS project monies and timing of our annosus data collecting foray with Dick Collins and Bill Lambert. At the latter stop Mike spoke with Bob Taylor about the proposed SPBIS report changes.

In summary, the Holly Springs has a serious annosus root rot problem and, further, has potential for worse problems in the future if appropriate preventive measures are not taken. They do seem, at this time, to be on top of their SPB problem.

Both Mike and I appreciated the opportunity to give instruction to the field crews and look forward to further constructive interaction. A letter summarizing current annosus control recommendations will be sent to Steve Weaver.



PAUL A. MISTRETTA
Supervisory Pathologist



MICHAEL D. CONNOR
Entomologist